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GOLD POTENTIAL OF THE KETYET RIVER AND WOODBURN LAKE GROUPS, TEHEK LAKE AREA, NWT

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ABSTRACT

The Tehek Lake area, north of Baker Lake, is underlain by a volcano-sedimentary assemblage including ultramafic flows, felsic to mafic volcanic rocks, greywacke, pelitic rocks and white orthoquartzite. Banded iron formation outcrops with the sediments at or near the contact with the volcanics. The assemblage has been mapped as the Ketyet River Group in the Baker Lake map area and as the Woodburn Lake Group in the Amer Lake map area to the northwest. The Cullaton Lake area, site of the B-Zone Gold Deposit, is underlain by a similar volcano-sedimentary assemblage.

To evaluate the gold potential of the Tehek Lake area, 106 samples were collected from outcrops and frost heave of iron formation; 42 from gossan zones, 20 from quartz veins; and 7 from carbonate-rich shear zones. All samples were analyzed for gold. Most samples of iron formation were also analyzed for silver, arsenic, tungsten, copper, lead, zinc and nickel. Some of the other samples were analyzed for Ag, Cu and a few for Pb, Zn, Ni. The samples were arbitrarily classified as highly anomalous (>340 ppb Au), moderately anomalous (>68 ppb Au), anomalous (>34 ppb Au) and possibly anomalous (>17 ppb Au). All but four of the possibly anomalous to highly anomalous samples were collected from seven distinct areas. The geology and distribution of samples in each of these seven areas are discussed and two areas are considered especially interesting.

INTRODUCTION

The Tehek Lake area extends from 20 to 120 km north of Baker Lake in the northern part of the Churchill Structural Province and the District of Keewatin. The area is bounded by latitudes 64 30'N to 65 25'N and longitudes 95 00'W to 96 30'W and includes all of NTS areas 56 D/11 to 14, E/4, 66 A/9, 16 and H/1, and the southern parts of 56 E/5 and 66 H/8.

The only gold production in the Keewatin District was from the B-Zone Deposit at Cullaton Lake area, 440 km south-southwest of Tehek Lake. This deposit, and others in the NWT, are in banded iron formation intercalated with Archean volcanics and greywackes (Eade, 1974, Gibbins, 1981 and Page, 1981). Similar iron formation outcrops in the Tehek Lake area. Spinifex-textured ultramafic flows, which Pyke (1976) and Keays (1984) consider to have spatial and genetic relationships with gold deposits, are present at Griffin Lake (Eade and Chandler, 1975), 28 km northwest of the B-Zone Deposit, and in the Tehek Lake area.

SCOPE AND PURPOSE OF PROJECT

A study of the gold potential of the Tehek Lake area was undertaken in 1985. Approximately 200 sites where occurrences of iron formation, gossan zones, quartz veins or carbonate zones had been reported in published and unpublished geological reports were investigated and sampled. In a few cases, the reported occurrence could not be found. Very little time was spent at each site and no attempts were made to prospect along strike from known occurrences. The intent of the field work was to sample as many occurrences as possible while helicopter support was available.

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GEOLOGY

The area north of Baker Lake is typified by a series of northeast-trending supracrustal belts separated by large expanses of para- and orthogneisses (Patterson and LeCheminant, 1985). These Archean and unassigned supracrustals include quartzite, greywacke, slate, volcanic rocks, minor iron formation and spinifex-textured komatiites. The Archean Prince Albert Group, outcropping to the northeast, consists of essentially the same lithologies (Schau, 1982).

The Aphebian Amer Group outcrops northwest of the Tehek Lake area and, locally, uncomformably overlie the Archean supracrustals. This group includes a white orthoquartzite (Patterson 1980, 1981) which

is remarkably similar to some of the quartzites included in the Archean package.

Archean and Aphebian plutons intrude the supracrustals. Major northeast- to east-trending faults and mylonite zones dissect the northern Churchill Structural Province into three tectonic blocks representing different levels of crust (Heywood and Schau, 1978). The Tehek Lake area is in the Armit Lake Block which consists of intermediate- to deep-level crust.

The geology of the Tehek Lake area, as presented in Figure 1, is compiled from reports by Schau (1983) for the southeast corner of the map area, Donaldson (1966) for the southwest corner, Tella and Heywood (1983) for the northwest corner, and Patterson and LeCheminant (1985) for the northeast corner. Additional detailed information for the area of lakes 460 and 392 ("Third Portage" and "Pipedream" Lakes) was obtained from Ashton (1981; 1982). Nadeau (1981) discusses the area northeast of Whitehills Lake.

Geological data was also abstracted from the following unpublished reports: Hudec (1969) and Roberts (1970) for the area northwest of Whitehills Lake; Arseneau and others (1980) for Area 5; Curtis (1978) and Fischer and Mariatt (1979) for the area north of Tehek Lake.

A belt of greywacke, schist, phyllite and argillite trends northeast from the Thelon River and bifurcates on the southwestern shore of Tehek Lake. The southern branch of the belt trends east, south of Tehek Lake, and is part of the Ketyet River Group. The slate, shale, phyllite, metasiltstone and biotite schist unit of the Ketyet River Group which outcrops southeast of Tehek Lake is probably the stratigraphic and/or metamorphic equivalent of the greywacke assemblage west of the lake. The northern branch of the belt extends northwest of Tehek Lake and is included in the Woodburn Lake Group in the vicinity of lakes 460 and 392. The slate package outcropping north of Tehek Lake is also considered to be the stratigraphic equivalent of the greywacke package.

In the northwest corner of the map area, the greywacke package is underlain by felsic to intermediate tuffs, flows and shallow intrusive rocks enclosing spinifex-textured ultramafic flows and ultramafic dykes. The volcanic component of the Ketyet River Group is more mafic and nearly devoid of ultramafic flows. Volcanics of this group outcrop west and southwest of Tehek Lake and with quartzite on the north shore of Whitehills Lake. Spinifex-textured komatiites outcrop in one small area at the greywacke/volcanic contact north of Whitehills Lake.

The stratigraphic position of the white quartzite which outcrops extensively in the southern, eastern and northwestern parts of the map area is poorly understood. Ashton (1982) indicates that the quartzite could be klippens tectonically emplaced from some distance away or could be older or younger than the volcanics. The latter alternatives are not mutually exclusive. There could be two generations of volcanic rocks; one predating the greywacke and slate

assemblages and enclosing the komatiitic flows and a second, younger sequence overlying the quartzites along the north shore of Whitehills Lake.

The Ketyet River Group includes one other unit. Paraconglomerates, with stretched granitoid, quartzite, dolomite and greywacke pebbles, outcrop in a northeast-trending band, southeast of Tehek Lake, in contact with the Akutuak River gneiss complex.

The slate and schist package east of Whitehills Lake encloses layers of disseminated to semi-massive sulphides which weather into extensive gossans. Schau (1983) presents the results of analyses of the clay fraction of some of these gossan zones but did not determine the Au content. Some sulphide-poor but biotite-rich metasediments also weather into highly visible gossan zones.

Extensive layers of iron formation are associated with the volcanics. In the Whitehills Lake area, iron formation extends from the Thelon River, in close proximity to the volcanic-greywacke contact, to northeast of the lake. Other bands outcrop within the greywacke to the north. The pattern is similar northwest of Tehek Lake where iron formation outcrops in proximity to the volcanic sequence and within the greywacke/slate package. The iron formation, ranging in composition from quartz-magnetite to quartz-hematite, is often contorted and associated with pyritiferous black slate. In the vicinity of intrusions, the iron formation is metamorphosed to banded and contorted amphibolite, and the adjacent slate is metamorphosed to biotite-garnet schist. A maximum of 10% pyrite was detected in the samples of iron formation collected.

The supracrustals are locally altered to biotite-bearing gneisses of the Quoich River complex southeast of and in the northwest part of Tehek Lake. The metasediments were also infolded with the orthogneisses of the Akutuak River complex which outcrop along the southern edge of the map area.

The supracrustals and gneisses were intruded by an Archean granodiorite mass, north of Tehek Lake, and by the granites of the Tehek Plutonic complex. The complicated geological pattern south of Tehek Lake suggests that the present erosion surface is nearly equivalent to the roof of a batholith (Heywood and Schau, 1981). Plutonic apophyses have risen to different levels into the supracrustals so that, while portions of the plutonic complex are granite, others are intricate mixtures of metasedimentary slices and low-dipping granitic dykes and sills.

Smaller gabbroic and ultramafic plutons outcrop in association with the volcanics northwest of Tehek Lake. Some of these are related to the ultramafic flows and others are younger than the Tehek complex. Syenitic and granitic bodies intruded the plutonic complex and supracrustals in Aphebian times.

RESULTS OF SAMPLING AND ANALYSIS

The sites and lithologies from which the 175 analyzed samples were collected are indicated on Figure 1. Of these samples, 106 are from outcrops of iron formation and the associated pyritic slate. Forty-two samples are from gossan zones in the southeast corner of the map area and in the vicinity of or on strike with the iron formation. Twenty samples are of quartz veins associated with gossan zones and the volcanic rocks in the Whitehills Lake area. Seven are from carbonate-bearing shear zones and breccias in volcanic rocks north of Whitehills Lake.

All samples were analyzed for Au. Iron formation samples were also analyzed for Ag, As, W, Cu, Pb, Zn and Ni. Most of the other samples were analyzed for Au, Ag and Cu and one or more of the other metals. Analyses were done by Apex Analytical Laboratories Ltd. in Calgary using the fire assay/atomic absorption method for Au and atomic absorption for the other metals. The results are presented in Appendix I and summarized in Table I. The "highest values" column is included in Table I to highlight the shape of the tail end of those distribution curves that are highly skewed.

TABLE I: Summary of Analytical Data

	Number of Samples	Range	Highest Values
Au (ppb)	175	<5 to 754	
Ag (ppm)	161	<0.1 to 7.9	35.3
As (ppm)	116	<1 to 660	1290
W (ppm)	110	<2 to 10	69
Cu (ppm)	161	<1 to 336	
Pb (ppm)	115	4 to 56	259 and 2200
Zn (ppm)	116	10 to 200	
Ni (ppm)	119	6 to 489	700 to 1270 (5)

There is no apparent correlation amongst the metal concentrations detected. The highest Ag assay (35.3 ppm) was in sample B18 collected from a 2- to 3-m wide pocket of massive pyrite and pyrrhotite associated with a gossanous quartz vein in biotite schist east of Whitehills Lake. Sample B18 also contained <5 ppb Au and 290 ppm Cu. The ten highest As concentrations (112 to 1290 ppm) were detected in samples of iron formation or associated slate, five of which also contain more than 31 ppb Au. The other five samples contain <5 ppb Au. Sample F22, containing 69 ppm W, was collected from a 1- to 2-m wide and 50-m long area of quartz-veined, gossanous biotite phyllite frost heave in an area of biotite schist outcrops. The higher Cu and Zn concentrations were in samples of iron formation and slate, some of which also contain anomalous gold concentrations and will be discussed later. Sample A11 which contains 2200 ppm Pb is from a galena-bearing, massive sulphide pocket 10 cm wide and 50 cm long in a 15-m thick quartz vein cutting quartzitic sediments east of Whitehills Lake. The second highest Pb

concentration, 259 ppm, was detected in a sample from a massive hematitic vein in syenite intruding pyritic volcanic rocks on the north edge of Area 2. The Ag content of these Pb-rich samples is the second and third highest detected (7.9 and 6.2 ppm), but the Au content is <5 ppb. Of the five samples anomalously rich in Ni, three (L18, 20, 25) are from iron formation associated with komatiitic flows in Area 5, one (D12) is from slate in Area 1 and one (E1) is from a gossan zone in spinifex-textured komatiites outcropping north of Whitehills Lake.

The gold values were arbitrarily grouped into five classes (Table II) with multiples of 34 ppm (1 oz/ton) as class limits. No other statistical analysis of the data was undertaken. All of the anomalous to highly anomalous samples were collected from the seven areas of interest outlined in Figure 1 and described below. All but four of the possibly anomalous or elevated background samples (B12, C5, H32 and H38) are also from these areas.

TABLE II: Classification of Au Anomalies

Class Limits	Class	Number of Samples	Range
340 ppb	Highly anomalous	5 (2.9%)	342 to 754
68 ppb	Moderately anomalous	8 (4.5%)	69 to 171
34 ppb	Anomalous	10 (5.7%) 23 (13.1%)	34 to 65
17 ppb	Possibly anomalous	14 (8.0%)	17 to 31
	Background	47 (26.9%) 91 (52.0%)	7 to 14 <5

Table III to IX list the analytical results of all the samples collected from the seven areas of interest. The "Type" column indicates whether the sample is a grab sample (g) or a composite sample (c). Composite samples consist of 5 to 15 grab samples collected from different frost-heaved blocks or outcrops across the width of the band of iron formation or the gossan zone. The "Source" column specifies whether the samples were collected from frost-heaved blocks (fh), subcrop (sc) which consists of large, low-lying, frost-heaved and broken but essentially *in situ* blocks of rock, outcrop (oc) or sub-anguiar boulders (b).

Area 1

The geology of this area, as presented in Figure 2, is modified from Hudec (1969). The sampling sites were selected using the map by Taylor (in press) and the report by Roberts (1970).

The north and eas parts of the area are underlain by the greywacke package which is in ontact to the southwest with the underlying mafic volcanic flo s. The contact is disrupted west of "Greyhound" Lake by east-south ast trending faults. The volcanics are stratigraphically a d/or structurally overlain by quartzites in the southeast corner of ie map area. The Akutuak River gneiss complex outcrops between t e volcanics and quartzites in the south-central part of the area.

The area was sampl d to determine the gold potential of three different structure and lithologies. All three were found to contain possibly a omalous, or better, gold concentrations (Table III). The 50- to 75 n thick layer of iron formation, which extends northeast from th Thelon River and curves northwest west of "Greyhound" Lake, wa sampled in 7 places. Of the 16 samples, one is highly anomal us, one is anomalous and two are possibly anomalous. The two nomalous samples are from the same area of frost heave and c nsist of a quartz-eye porphyry containing 514 ppb Au and a pyritic qua tz vein containing 38 ppb Au. Although sample C14 contained only background concentrations, it is of interest because it is a comp site sample from across the belt. Of the 10 or so grab samples m ing up this composite, at least one must have contained anomalous Au concentrations. The iron formation is faulted off west of "Greyhound" Lake but hematite-quartz iron formation (sample 20) was detected at the same stratigraphic position on an islan in the lake.

The greywackes on his same island also enclose carbonate-rich shear zones, a sample of w ich contains 36 ppb Au. A possible extension of this zone of arbonate enrichment, on the mainland to the east, also contains possib anomalous gold concentrations (samples L27 and L29).

The third type of target sampled were two quartz veins outcropping in volcanics southwe t of "Greyhound" Lake. Of the four samples collected from the southern vein, two were moderately anomalous (82 and 171 ppb Au) and he was possibly anomalous. The two samples from the norther quartz veins were anomalous and possibly anomalous. The quar z veins are 25 to 35 m wide and composed mainly of barren coarse hite quartz. The anomalous gold concentrations are associated wit pockets of grey quartz and pyritic quartz enclosing fragments f wall rock.

Area 2

In this area, northe st of Whitehills Lake, the easterly trending greywacke-volcanic-q artzite package of Area 1 is deformed into a south-trending antif m (Nadeau, 1981 and Fig. 2). The deformation was caused by the ntrusion of the Tehek Lake plutonic complex which outcrops to the east

Four layers of iron ormation were sampled in the area. The first layer, at the volc nic-greywacke contact, is on strike with the iron formation sampled in Area 1. The second layer outcrops 1 km further

TABLE III: Analytical Results of Samples from Area 1

Sample Number	Type	Source	Description	Au ppb	Ag ppm	As ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm
85-C14	c*	fh	qtz-mag-hem IF	12	0.3	7	<1	15	31	13
85-D1	g	fh/sc	qtz-mag IF	12	0.2	3	<1	11	24	13
85-D2	g	fh/sc	schistose qtz-mag IF + sulphide	<5	0.3	5	5	15	56	17
85-D3	g	oc	qtz-hem IF + slate to SW	<5	0.2	5	6	13	108	17
85-D4	g	oc	qtz-hem IF at intrusion contact	19	0.5	17	103	14	112	18
85-D5	g	oc	qtz-eye porphyry(?) in slate	7	0.2	2	4	12	200	13
85-D7	g	fh/sc	slaty IF + pyrite cubes	19	0.2	10	16	18	61	37
85-D8	g	fh/sc	qtz-hem IF + pyrite	7	0.2	5	18	10	26	15
85-D9	g	fh/sc	qtz-veined slaty IF	<5	<0.1	17	8	15	48	20
85-D10	g	fh	qtz-mag IF + pyrite	12	<0.1	5	2	11	27	15
85-D11	g	fh	qtz-hem IF	<5	<0.1	2	2	16	40	18
85-D12	g	sc	slaty IF	<5	0.4	84	60	10	106	1270
85-D13	g	sc	qtz vein + pyrite in IF	38	0.2		147			
85-D14	g	fh	qtz-eye porphyry(?) in IF	514	<0.1		3			
85-D15	g	oc	qtz-mag IF + pyrite cubes	<5	0.4	5	2	11	28	16
85-D16	g	oc	qtz-pyrite vein in IF	<5	<0.1	4	3	17	36	15
85-D17	g	oc	carb zone on edge of volc	36	0.2		14			
85-D18	g	oc	qtz-pyrite vein in carb zone	14	<0.1		8			
85-D20	g	oc	qtz-hem IF + pyrite	<5	<0.1	3	6	19	54	18
85-D21	g	oc	carb zone in greywacke	<5	<0.1	39	2	16	58	298
85-K2	c	oc	qtz vein (qtzite?) in chlorite-schist - 35m wide	14	0.2		11			
85-K5	g	oc	grey qtz + sulphide (2 x 20m)	171	0.3	99	15	9	50	9
85-K6	g	oc	pink qtz vein (hem)	19	0.2		6			
85-K7	g	fh	gos qtz vein + sulphide	82	<0.1	29	13	8	24	6
85-K9	g	oc	gos qtz + volcanic + sulphide on S edge of 25m-wide qtz vein	24	0.4		3			
85-K10	g	oc	gos qtz + volcanic fragments	34	0.6		9			
85-L27	g	oc	qtz-carb in qtz-chlorite schist	19	<0.1		12			
85-L28	g	oc	qtz-veined intrusion	9	0.2		153			
85-L29	g	oc	qtz-sericite schist + qtz veins	17	0.3		3			
85-L30	g	oc	qtz-carb pod in volcanic (2x7m)	9	0.4	<1	68	16	31	10
85-L31	g	oc	qtz vein in volcanic	9	0.2		118			

* see Appendix 2 for list of abbreviations used in tables

TABLE IV: Analytical Results of Samples from Area 2

Sample Number	Type	Source	Description	Au ppb	Ag ppm	As ppm	Cu ppm	Pb ppm	Zn ppm	N ppm
85-F11	c	fh/sc	slate + hem IF - 70m wide	<5	0.2	12	4	11	70	27
85-F12	g	fh	gos layer in IF - 1m thick	<5	0.8	3	94	19	57	24
85-F16	g	oc	gos slaty sed + qtz	<5	0.6	38	103	8	126	18
85-F17	g	sc	qtz-mag IF - 10 to 15m wide	<5	0.4	2	<1	10	48	18
85-F19	g	fh	gos qtz-mag IF	50	0.3	660	19	6	43	16
85-F20	g	oc	gos pyritic qtzite + qtz vein (1.5 x 1.5m)	342	0.7	32	22	48	69	27
85-F21	g	oc	gos phyllite + qtz veins	12	0.6	23	36	18	73	13
85-F22	g	fh	gos amph + sulphide in biotite schist (2 x 15m)	<5	0.2	23	86	6	106	19
85-F24	g	fh	gos contorted amphibole-qtz IF	9	0.4	<1	233	17	40	22
85-G3	g	fh	granitic dyke in gos amph	394	3.4		3			
85-G5	c	fh	amph + bio-gar schist/qtz veins	14	0.8	<1	126	10	96	19
85-G8	c	fh	gos bio schist + amph	17	0.6	1	122	5	54	49
85-G11	g	oc	gos granitic dyke	7	0.4	2	4	30	36	13
85-G12	g	fh	gos bio schist + amph	7	0.3	1	41	8	52	20
85-G14	g	oc	gos bio schist + sulphides	<5	0.2		71			
85-G16	g	fh	amph + sulphides	9	0.2	<1	14	4	12	12
85-G17	g	oc	qtzitic sed + wisps of pyrite	<5	0.2		92			

north in the greywacke. The easternmost iron-formation samples are from a layer at the volcanic-quartzite contact and a second layer at or near the volcanic-schist contact. The relationship between the two layers to the east and between the eastern and western layers is not known.

Of the 17 samples collected in Area 2 (Table IV), two are highly anomalous, one is anomalous and one is possibly anomalous. Sample F19 is from a large frost heave of quartz-magnetite iron formation on the shore of the western lake. It contained 50 ppb Au. Sample F21, 500 m to the east, is from quartz-veined gossanous phyllitic slate possibly equivalent to the iron formation in the greywackes to the north. It contains 12 ppb Au and is along strike from a small area of pyritic quartz-veined quartzitic greywacke containing 342 ppb Au (sample F20).

The eastern bands of iron formation are of amphibolite grade. One highly anomalous sample (G3), containing 394 ppb Au, was collected from a granitic dyke cutting the iron formation. Samples G5 and G7, collected from the gossanous amphibolite and biotite-garnet schist adjacent to the dyke, contained 14 and 17 ppb Au.

Area 3

The geology of this area, north of Area 2, is relatively simple. A thick sequence of greywacke, intruded to the west by Tehek Lake plutonic complex granite and to the east by Aphebian granite, encloses a number of poorly defined and possibly discontinuous layers of amphibolite iron formation. The greywackes are locally altered to biotite schist.

Three samples of the iron formation (H7, H27 and H28) contain 60, 120 and 48 ppb Au (Table V). Of the other eight samples collected from amphibolite and biotite-garnet schist layers, all but one contains <5 ppb Au. One sample of gossanous biotite schist in the west central part of the area contains 17 ppb Au.

Area 4

Area 4 is one of three areas of interest within NTS area 66 H/1, the geology of which is described in Ashton (1981, 1982). Complex stratigraphic or structural interlayering of felsic volcanic rock and quartzite occurs in the west half of the area, while the east half is underlain mainly by greywacke in contact to the south with volcanic and mafic to ultramafic intrusive rock. Granites of the Tehek Lake plutonic complex outcrop in the southwest and southeast corner of the area.

Bands and pods of iron formation outcrop in the volcanics and greywackes. A laterally extensive, locally highly gossaneous layer of amphibole-magnetite and quartz-magnetite iron formation on the east shore of "Third Portage" Lake was sampled repeatedly but contains only <5 to 7 ppb gold (Table VI). On the other hand, sample J28, a composite sample from frost heave of fresh-looking quartz-hematite-magnetite iron formation, contained 394 ppb gold.

TABLE V: Analytical Results of Samples from Area 3

Sample Number	Type	Source	Description	Au ppb	Ag ppm	As ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm
85-H5	g	oc	gos bio gneiss + pyrite	<5	0.3		47			
85-H7	g	oc	gos bio-gar schist + amph	60	0.4	172	19	4	69	26
85-H9	g	oc	gos bio schist	17	0.3		90			
85-H13	g	oc	amph IF + sulphides	12	0.2	2	5	6	48	27
85-H15	g	fh/sc	gos amph + pyrite - 5m wide	<5	0.7	2	97	13	67	17
85-H17	g	fh	gos amph + pyrite	<5	0.3	3	133	16	128	33
85-H20	c	sc	gos bio-gar schist + amph	<5	0.2	2	34	7	53	34
85-H21	g	fh/sc	amph IF in bio schist	<5	<0.1	2	20	6	46	19
85-H24	g	fh	amph IF	<5	0.2	2	38	19	117	28
85-H27	g	fh/b	gos amph	120	0.3	2	44	13	67	18
85-H28	g	sc	gos amph + mag	48	0.2	2	27	6	31	12
85-H29	g	fh	amph + bio-gar schist/qtz veins	<5	<0.1	2	2	19	55	23

TABLE VI: Analytical Results of Samples from Area 4

Sample Number	Type	Source	Description	Au ppb	Ag ppm	As ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm
85-J11	c	fh	gos frost boils with fragments of amph, pyritic slate and qtz-mag IF (20 x 20m)	7	0.3	7	36	11	46	19
85-J15	c	fh/sc	qtz-mag IF + hem slate	<5	0.4	3	2	6	31	72
85-J19	g	oc	volcanic breccia + carb cement	<5	0.2	5	97	10	50	445
85-J20	g	oc	carb cement	<5	0.2	6	42	8	51	489
85-J23	g	fh	qtz-mag IF + amphibole - 9m wide	<5	<0.1	5	12	6	18	20
85-J24	g	sc	mag-amph schist + sulphides - 9m wide	<5	0.3	4	9	9	18	27
85-J25	c	oc	gos qtz-mag IF + amphiboles	7	0.4	2	28	12	39	10
85-J28	c	fh	qtz-hem-mag IF	394	0.3	8	27	8	45	21
85-J30	g	fh	gos qtz-mag IF	56	0.2	112	12	4	14	16
85-J31	g	fh/b	gos amph + sulphides	19	0.4	<1	56	23	48	20

Grab sample J30, from a second area of slightly gossanous quartz-magnetite iron formation along strike to the south, contained 96 ppb Au. Smaller pods of iron formation, one chalcopyrite and one arsenopyrite occurrences are mentioned in Ashton (1981) but were not sampled.

Area 5

Three northeast-trending belts of volcanic rocks, intruded by granite of the Tehek Lake plutonic complex, underlie this area on the west shore of lake 392 ("Pipedream" Lake in Ashton, 1982). Archean granodiorite outcrops to the north and greywacke outcrops on the islands to the east. The volcanic rocks include felsic tuffs, rhyolite flows and spinifex-textured ultramafic flows. Sulphide-bearing iron formation outcrops at the felsic volcanic-ultramafic flow contact and within granitic terrain along strike to the east.

Four samples were collected from the exposures of iron formation (Table VII). They contain possibly anomalous to moderately anomalous concentrations of Au. The four samples are enriched in Ni and two are enriched in Cu. This probably reflects syngenetic or epigenetic enrichment from the ultramafic flows.

Area 6

Across "Pipedream" Lake from Area 5, all the lithologies of the Woodburn Lake Group are exposed in a series of northeast-trending belts disrupted by northerly trending faults. Two major belts of iron formation occur within greywackes in the central part of Area 6. Thinner, less continous bands of iron formation to the southwest and northwest (Ashton, 1982) were not sampled.

Of the 11 samples collected in the area (Table VIII), eight are from the main bands of iron formation and three are from quartzite and associated conglomerate. Only one of the iron formation samples was enriched in Au (69 ppb) and it was collected from a 3-m wide layer of gossanous, pyritic, slaty sediments at the edge of a large quartz-magnetite-hematite iron-formation outcrop. Sample 114 of gossanous schistose quartzite on the edge of a northeast-trending fault, in the northern part of this area, contained 98 ppb Au. The other anomalous sample was collected from a 1-m thick layer of pyritic conglomerate in the quartzite overlying the greywacke enclosing the main band of iron formation. The conglomerate sample (J4) contained 65 ppb Au and a sample (J3) from the adjacent schistose quartzite contained 7 ppb Au.

Area 7

The geology of this area (Figure 2) was obtained from Curtis (1978) who indicated that the simplest interpretation of the area would be a southwest-plunging synclinorium. The shallowly dipping quartzite could be interpreted as occupying the core of the structure with the more steeply dipping and older schists and volcanics occurring in the limbs. This synclinorium is ensconced in granitic rocks of the

TABLE VII: Analytical Results of Samples from Area 5

Sample Number	Type	Source	Description	Au ppb	Ag ppm	As ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm
85-L18	c	oc	gos qtz-mag IF (15 x 75m) at felsic/ultramafic contact	36	0.8	20	26	34	16	700
85-L20	g	oc	qtz-mag IF	24	0.3	4	128	23	48	1200
85-L22	g	oc	qtz-mag IF + 10% pyrite	74	1.7	5	336	38	47	400
85-L25	c	fh	gos pyritic sed or IF - 20m wide	53	0.5	3	54	18	197	900

TABLE VIII: Analytical Results of Samples from Area 6

Sample Number	Type	Source	Description	Au ppb	Ag ppm	As ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm
85-I14	g	oc	gos schistose qtzite	98	<0.1		2			
85-I16	g	fh/sc	gos slaty sed + pyrite - 3m wide	69	2.3	1290	216	52	64	28
85-I17	g	oc	qtz-mag IF - 1m thick	7	<0.1	52	10	4	16	12
85-I18	g	oc	mag-hem IF (little qtz)	<5	<0.1	10	2	6	28	15
85-J1	g	sc	schistose mag-slate IF	<5	<0.1	11	2	8	21	23
85-J3	g	sc	gos schistose qtzite	7	0.3		3			
85-J4	g	sc	pyritic conglomerate - 1m thick	65	0.5		9			
85-J5	g	oc	mag-slate IF - 5 to 15m thick	<5	0.3	14	8	7	34	17
85-J6	g	sc	gos mag-slate IF (boxwork)	<5	0.4	183	2	6	28	15
85-J7	g	sc	gos brecciated IF + qtz + pyrite	<5	0.2	179	23	4	16	13
85-J8	g	sc	qtz-mag IF	<5	0.2	12	2	5	28	15

TABLE IX: Analytical Results of Samples from Area 7

Sample Number	Type	Source	Description	Au ppb	Ag ppm	As ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm
85-11	g	sc	qtz-pyrite veins in metased	<5	0.3		50			
85-13	g	fh	qtz-pyrite veined volc (1 x 2m)	754	1.3		2			
85-14	g	sc	qtz-pyrite veined volc	<5	0.5		92			
85-15	g	fh/b	qtz-mag IF	82	0.3	34	62	6	41	26
85-17	g	oc	amph IF in pyritic volc, 2m wide	<5	0.4	2	298	16	71	96
85-18	g	oc	amph	<5	0.3	2	43	4	39	44
85-19	g	oc	gos amph IF	38	0.5	2	149	8	46	30

plutonic complex which outcrop in the southeast corner of the area. A number of iron formation outcrops and magnetic anomalies are indicated in Curtis and Taylor (1978). The iron-formation bands occur in the schist and at the schist-volcanic and schist-quartzite contacts.

Three areas of iron formation and one of volcanic rocks with quartz-pyrite veins were sampled. Sample 13 (Table IX) of quartz-pyrite veined volcanic frost heave contains the highest Au concentration (754 ppb) detected during this study. Sample 15 of quartz-magnetite iron formation, 5 km further along strike from 13, is moderately anomalous (82 ppb). One sample, from a second band of amphibolite iron formation to the northeast, contains 38 ppb Au. The other four samples all contain <5 ppb Au.

CONCLUSIONS

The Woodburn Lake and Ketyet River Groups consist predominantly of greywacke and derived schists underlain by a felsic to ultramafic volcanic sequence and overlain by white orthoquartzite. A number of iron-formation bands occur within the sediments especially near their contact with the volcanics.

The geology is similar to that of the Cullaton Lake area where ultramafic flows and volcanic rocks underlie the greywackes enclosing the gold-bearing oxide to sulphide facies iron formation of the B-Zone deposit.

Of the 175 samples collected, mainly from iron formation, 23 or 13% were considered anomalous and 14 or 8% were classified as possibly anomalous. The anomalous and most of the possibly anomalous samples were collected from seven distinct areas. The two most promising areas are northwest of Whitehills Lake where anomalous Au concentrations were detected in samples of iron formation, quartz veins and carbonate zones, and north of Tehek Lake where the sample with the highest Au concentration detected during this study was collected from pyritic volcanic rock along strike from Au-enriched iron formation.

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APPENDIX 1: Analytical data

Sample Number	Sample Type	Lithology	Au ppb	Ag ppm	As ppm	W ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm
85-A2	qv/gos	metased	9	<0.1			6			
85-A4	gos	metased (slate)	<5	<0.1			5			
85-A5	gos	metased (slate)	9							
85-A6	gos	metased (slate)	14							
85-A8	qv/gos	metased (qtzite)	<5	0.8			45			
85-A10	gos	metased	<5	<0.1			8			
85-A11	qv/gos	metased (qtzite)	<5	7.9			10	2200		
85-A12	gos	metased	9	0.6			51			
85-A13	gos	metased	<5							
85-A14	gos	bio schist	9							
85-A16	gos	bio schist	<5	0.5			7			
85-A18	gos	bio-gar schist	9	4.2			296			43
85-A19	qv/gos	granite	<5	<0.1			4			
85-B1	gos	bio schist	9	0.2			9			
85-B3	gos	bio schist	<5							
85-B4	gos	bio schist	9							
85-B6	gos	bio schist +qv	<5							
85-B7	gos	metased	9							
85-B8	gos	metased	14							
85-B9	gos	metased (qtzite)	<5	2.1			127			
85-B10	qv/gos	metased	<5							
85-B12	gos	metased (qtzite)	19							
85-B13	gos	metased +qv	9							
85-B14	gos	metased	<5							
85-B15	gos	metased	<5	5.3			6			
85-B16	gos	metased +qv	<5							
85-B17	qv/gos	bio schist	<5	4.4			63			
85-B18	qv/gos	bio schist	<5	35.3			290			
85-B20	gos	bio schist +qv	<5	2.4			133			
85-B23	gos	bio gneiss	14	1.4			36			109
85-B24	gos	bio schist	<5	1.6			26			164
85-C1	if	qtz	14	1	7	<2	13	40	24	10
85-C2	if	slate	9	2.5	21	6	329	56	68	18
85-C3	if	slate	<5	1.8	42	4	16	32	68	27
85-C4	if	qtz-pyrr	<5	0.4	15	<2	<1	8	10	9
85-C5	if	mag-qtz	19	1.4	3	<2	<1	20	24	14
85-C6	if	qtz pods	9	<0.1	2	4	<1	20	19	10
85-C7	if	qtz	<5	0.2	7	<2	<1	16	22	12
85-C8	if	mag-qtz	9	0.3	4	<2	<1	17	24	14
85-C9	if	mag-qtz	<5	0.2	11	<2	<1	16	23	14
85-C11	qv	metased	9	0.3			7			

Sample Number	Sample Type	Lithology	Au ppb	Ag ppm	As ppm	W ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm
85-C12	qv	metased (+carb)	14	0.3			6			
85-C13	if	mag-qtz	<5	0.4	6	<2	<1	20	29	16
85-C14	if	mag-hem-qtz	12	0.3	7	<2	<1	15	31	13
85-D1	if	mag-qtz	12	0.2	3	<2	<1	11	24	13
85-D2	if	mag-qtz	<5	0.3	5	2	5	15	56	17
85-D3	if	hem-qtz	<5	0.2	5	2	6	13	108	17
85-D4	if	slate	19	0.5	17	<2	103	14	112	18
85-D5	if	slate	7	0.2	2	<2	4	12	200	13
85-D7	if	slate	19	0.2	10	<2	16	18	61	37
85-D8	if	hem-qtz	7	0.2	5	<2	18	10	26	15
85-D9	if	slate +qv	<5	<0.1	17	2	8	15	48	20
85-D10	if	mag-qtz	12	<0.1	5	<2	2	11	27	15
85-D11	if	hem-qtz	<5	<0.1	2	<2	2	16	40	18
85-D12	if	slate	<5	0.4	84	<2	60	10	106	1270
85-D13	if	mag-hem-qtz	38	0.2			147			
85-D14	if	mag-hem +qtz porph	514	<0.1			3			
85-D15	if	mag-qtz	<5	0.4	5	<2	2	11	28	16
85-D16	if	mag-qtz +qv	<5	<0.1	4	4	3	17	36	15
85-D17	cz	volc +qv	36	0.2			14			
85-D18	cz	volc +qv	14	<0.1			8			
85-D20	if	hem-qtz	<5	<0.1	3	<2	6	19	54	18
85-D21	cz	greywacke	<5	<0.1	39	<2	2	16	58	298
85-D22	if	hem-qtz	<5	0.3	81	<2	2	13	26	10
85-D23	if	slate	<5	0.4	23	<2	5	16	102	50
85-D26	if	slate	<5	<0.1	16	<2	67	36	46	28
85-D27	if	slate	<5	<0.1	13	<2	2	13	13	8
85-D28	if	mag-qtz +qv	<5	0.2	19	2	2	15	26	14
85-D29	if	mag-qtz	<5	<0.1	3	<2	<1	16	20	13
85-D30	if	mag-hem-qtz	<5	<0.1	2	<2	<1	15	25	14
85-D31	if	hem-qtz	<5	<0.1	7	<2	12	15	44	22
85-D32	if	slate	<5	<0.1	40	2	23	13	82	21
85-D33	if	mag-qtz	<5	<0.1	5	<2	<1	12	24	15
85-D34	if	slate	7	0.4	10	2	11	27	100	81
85-D35	if	slate +qv	7	<0.1	44	<2	4	25	10	10
85-D36	if	mag-hem-qtz +qv	<5	<0.1	3	<2	<1	8	10	7
85-E1	gos	komatiite	<5	0.2	2	<2	76	12	53	1020
85-E3	if	slate	<5	0.2	21	<2	2	20	17	9
85-E4	if	hem-qtz	<5	0.3	346	2	2	16	47	18
85-E5	if	hem-qtz	<5	0.5	165	5	28	17	72	31
85-E6	if	hem-qtz	7	<0.1	3	<2	4	8	16	9
85-E7	if	hem-qtz	<5	0.2	5	2	<1	11	39	16
85-E8	if	slate	<5	0.2	24	3	4	18	39	14
85-E9	if	mag-hem-qtz	<5	0.4	5	<2	<1	10	27	17
85-E10	if	mag-hem-qtz	<5	1.4	206	4	60	36	67	50
85-E11	if	hem-qtz	<5	<0.1	18	<2	2	8	29	11
85-F1	if	hem-qtz	7	0.2	4	<2	2	9	47	19

Sample Number	Sample Type	Lithology	Au ppb	Ag ppm	As ppm	W ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm
85-F3	if	slate	<5	0.9	9	<2	73	36	40	24
85-F4	if	hem-qtz	<5	0.3	5	<2	3	13	35	19
85-F6	if	hem-qtz +slate	<5	<0.1	14	<2	13	16	54	32
85-F11	if	hem-qtz +slate	<5	0.2	12	<2	4	11	70	27
85-F12	if	hem-qtz	<5	0.8	3	<2	94	19	57	24
85-F16	gos	metased	<5	0.6	38	<2	103	8	126	18
85-F17	if	mag-qtz	<5	0.4	2	<2	<1	10	48	18
85-F19	if	mag-qtz	50	0.3	660	<2	19	6	43	16
85-F20	if	slate	342	0.7	32	<2	22	48	69	27
85-F21	gos	metased (qtzite)	12	0.6	23	4	36	18	73	13
85-F22	gos	metased	<5	0.2	23	69	86	6	106	19
85-F24	if	amph	9	0.4	<1	2	233	17	40	22
85-G3	if	granite dyke	394	3.4			3			
85-G5	if	amph-bio-gar schist	14	0.8	<1	5	126	10	96	19
85-G8	if	amph-bio-gar schist	17	0.6	1	<2	122	5	54	49
85-G11	gos	granite dyke	7	0.4	2	<2	4	30	36	13
85-G12	if	amph-bio schist	7	0.3	1	<2	41	8	52	20
85-G14	gos	bio schist	<5	0.2			71			
85-G16	if	amph	9	0.2	<1	<2	14	4	12	12
85-G17	gos	metased	<5	0.2			92			
85-G19	gos	metased	<5	0.3	<1		202		77	28
85-G20	gos	syenite +hem	<5	6.2	<1		14	259	36	90
85-G24	gos	metased	<5	0.5	3		42		36	13
85-H1	gos	metased	<5	0.2			<1			
85-H4	if	amph-bio gneiss	9	0.3	2	<2	38	11	23	12
85-H5	if	bio gneiss	<5	0.3			47			
85-H7	if	amph-bio-gar schist	60	0.4	172	<2	19	4	69	26
85-H9	gos	bio schist	17	0.3			90			
85-H13	if	amph	12	0.2	2	<2	5	6	48	27
85-H15	if	amph	<5	0.7	2	<2	97	13	67	17
85-H17	if	amph	<5	0.3	3	<2	133	16	128	33
85-H20	if	amph-bio-gar schist	<5	0.2	2	<2	34	7	53	34
85-H21	if	amph	<5	<0.1	2	<2	20	6	46	19
85-H24	if	amph	<5	0.2	2	<2	38	19	117	28
85-H27	if	amph	120	0.3	2	<2	44	13	67	18
85-H28	if	amph	48	0.2	2	<2	27	6	31	12
85-H29	if	amph +qv	<5	<0.1	2	<2	2	19	55	23
85-H30	if	amph	<5	0.6	5	<2	100	18	30	28
85-H31	if	bio-gar schist	<5	<0.1	2	<2	24	11	55	58
85-H32	gos	metased (qtzite)	19	<0.1			<1			
85-H38	if	mag-qtz	31	0.3	128	<2	33	8	38	20
85-H39	if	mag-qtz	7	<0.1	5	<2	53	9	33	20
85-H40	if	mag-hem-qtz	7	<0.1	3	<2	151	6	38	31
85-I1	gos	metased	<5	0.3			50			
85-I3	qv	volc +pyr	754	1.3			2			
85-I4	qv	volc +pyr	<5	0.6			92			

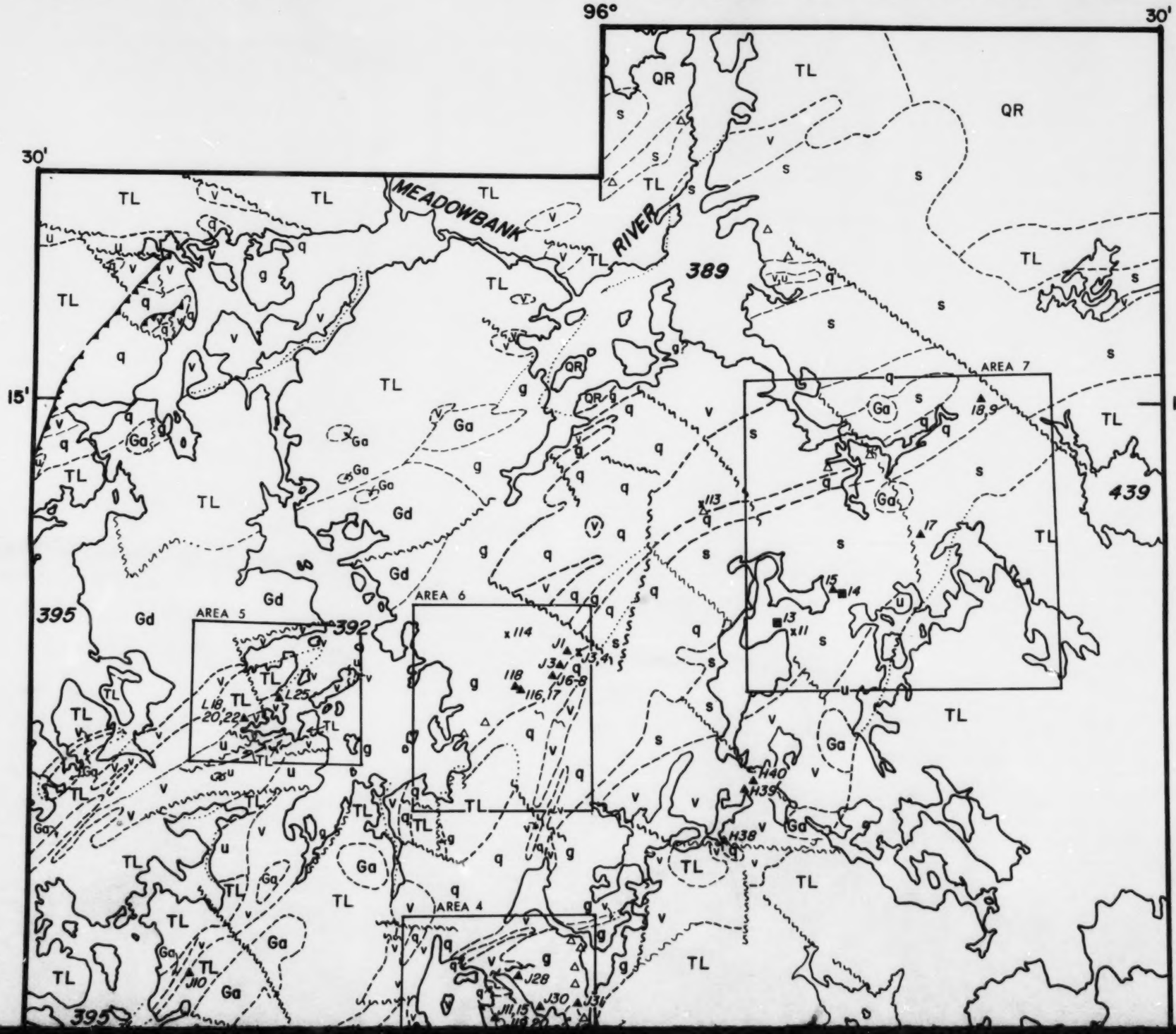
Sample Number	Sample Type	Lithology	Au ppb	Ag ppm	As ppm	W ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm
85-I5	if	mag-qtz	82	0.3	34	<2	62	6	41	26
85-I7	if	amph	<5	0.4	2	5	298	16	71	96
85-I8	if	amph	<5	0.3	2	<2	43	4	39	44
85-I9	if	amph	38	0.5	2	<2	149	8	46	30
85-I13	gos	metased (slate)	12	0.3			68			
85-I14	gos	metased (qtzite)	98	<0.1			2			
85-I16	if	slate	69	2.3	1290	10	216	52	64	28
85-I17	if	mag-qtz	7	<0.1	52	<2	10	4	16	12
85-I18	if	mag-hem-qtz	<5	<0.1	10	<2	2	6	28	15
85-J1	if	hem-slate	<5	<0.1	11	<2	2	8	21	23
85-J3	gos	metased (qtzite)	7	0.3			3			
85-J4	gos	metased (cong)	65	0.5			9			
85-J5	if	mag-qtz	<5	0.3	14	<2	8	7	34	17
85-J6	if	mag-slate	<5	0.4	183	<2	2	6	28	15
85-J7	if	mag-slate	<5	0.2	179	<2	23	4	16	13
85-J8	if	mag-qtz	<5	0.2	12	<2	2	5	28	15
85-J10	if	mag-qtz	<5	0.4	2	<2	2	8	44	18

APPENDIX 2: Abbreviations used in Tables III to IX and Appendix I

amph: amphibole/amphibolite
b: boulder
bio: biotite
c: composite sample
carb: carbonate
cz: carbonate zone
fh: frost heave
g: grab sample
gar: garnet
gos: gossan, gossanous
hem: hematite
IF/if: iron formation
mag: magnetite
metased: metasediment
oc: outcrop
pyr: pyrite
pyrr: pyrrhotite
qtz: quartz
qtzite: quartzite
qtzitic: quartzitic
qv: quartz vein
sc: subcrop
sed: sediment
volc: volcanic

E.G.S. 1985-11

FIGURE 1: GEOLOGY OF THE TEHEK LAKE ARE



LEGEND

APHEBIAN

G: Biotite granite, medium to fine grained

Sy: Biotite-rich syenite and quartz syenite, hornblend clinopyroxene-bearing

ARCHEAN

Ga: Mafic to ultramafic rocks; gabbro, peridotite, loc deformed and altered to chlorite schists; in par than TL

TL: Tehek Lake plutonic complex; biotite-rich granite, porphyritic to seriate

Gd: Granodiorite, well foliated and cataclastic

AR: Akutuak River gneiss complex; variably foliated an quartz diorite to biotite granodiorite with incl metasediments

QR: Quoich River gneiss complex; medium-grained biotit granodiorite gneiss in part equivalent to Ketyet Group

WOODBURN LAKE GROUP / KETYET RIVER GROUP

q: White orthoquartzite, quartz-mica schist

c: Conglomerate

g: Greywacke, chlorite schist, minor laminated chert and carbonate

s: Slate, shale, phyllit siltstone and biotite

Δ: Quartz-magnetite iron formation

u: Ultramafic rocks; basaltic and peridotitic komatiites, spinifex textured flows; minor felsic metavolcanic and layered volcanogeni rocks

v: Felsic to intermediate tuffs, flows and shallow intrusive rocks, rhyolite porphyry

v: Mafic volcanic flows, and intrusions, volca sediments

SYMBOLS

: Geological contact

: Fault

: Thrust fault

x : Gossan zone (not sampled)

▲412: Geochemical sample and number
▲: iron formation
■: quartz vein
x: gossan zone
○: carbonate zone

SCALE

5 0

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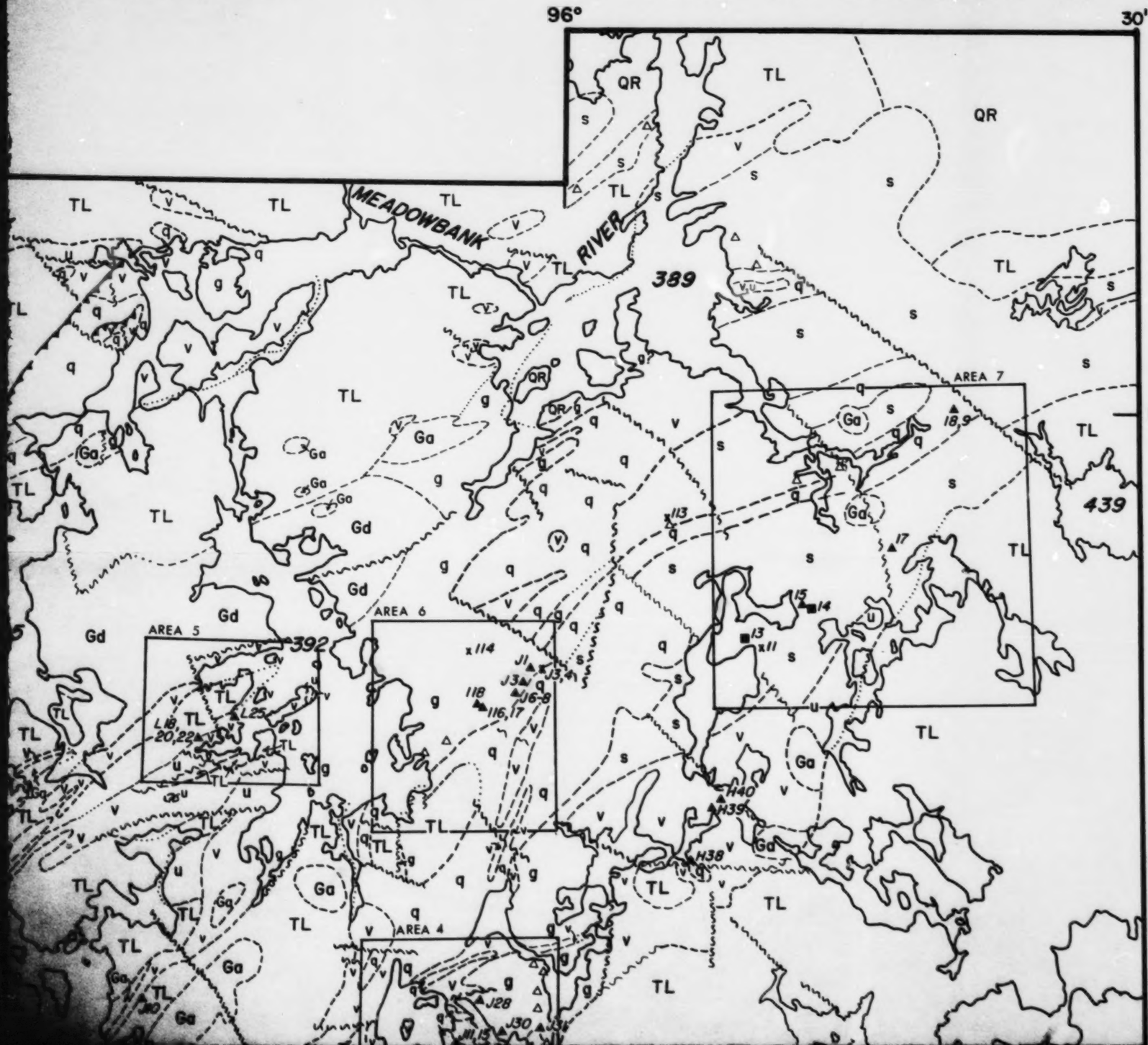
FIGURE 1: GEOLOGY OF THE TEHEK LAKE AREA



LEGEND

APHEBIAN

G: Biotite granite, medium to fine grained

Sy: Biotite-rich syenite and quartz syenite, hornblende- and/or clinopyroxene-bearing

ARCHEAN

Ga: Mafic to ultramafic rocks; gabbro, peridotite, locally deformed and altered to chlorite schists; in part older than TL

TL: Tehek Lake plutonic complex; biotite-rich granite, porphyritic to seriate

Gd: Granodiorite, well foliated and cataclastic

AR: Akutuak River gneiss complex; variably foliated and sheared quartz diorite to biotite granodiorite with inclusions of metasediments

QR: Quoich River gneiss complex; medium-grained biotite-bearing granodiorite gneiss in part equivalent to Ketyet River Group

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△: Quartz-magnetite iron formation

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v: Felsic to intermediate tuffs, flows and shallow intrusive rocks, rhyolite porphyry

v: Mafic volcanic flows, breccias and intrusions, volcanogenic sediments

SYMBOLS

Geological contact

Fault

Thrust fault

x: Gossan zone (not sampled)

▲412: Geochemical sample and number
▲: iron formation
■: quartz vein
⧓: gossan zone
○: carbonate zone

SCALE

5 0 5 MILES

rocks, rhyolite porphyry — sediments

SYMBOLS

- Geological contact
- Fault
- Thrust fault
- x : Gossan zone (not sampled)
- ▲A12, Geochemical sample and number
  - ▲: iron formation
  - ■: quartz vein
  - x: gossan zone
  - O: carbonate zone

SCALE

5 0 5 MILES

5 0 5 KILOMETRES

AREA 4

AREA 3

AREA 2

LAKE

TEHEK

QR

65°

45'

TL

Ga

g

q

v

s

u

Sy

395

460

312

LI8, 20, 22

H40 H39 H38

J10 J28 J30 J36 J11,15 J19,20 J23,24 J25

H32 H30,31 H28,29 H24 H21,27 H20 H13 H15 H17 H5,7 xH9 xH4 xH1

G19 G20,24 G17 G16 G14 G12 G11 G3,5,8

F1,3,4,6 F11,12 F17 F16 F22 F24

q/TL s/TL q,s

rocks, rhyolite porphyry — sediments

SYMBOLS

- Geological contact
- Fault
- Thrust fault
- x : Gossan zone (not sampled)
- ▲A12, Geochemical sample and number
  - ▲: iron formation
  - ■: quartz vein
  - ⧗: gossan zone
  - O: carbonate zone

SCALE

5 0 5 MILES

5 0 5 KILOMETRES

95°

65°

45'

AREA 4

AREA 3

AREA 2

LAKE

TEHEK

QR

460

312

TL

Ga

Gq

q

v

g

s

u

G

Sy

H40 H39 H38 H32 H30,31 H28,29 H24 H21,27 H20 H13 H15 H17 H5,7 H4 H1 H9

J28 J30 J36 J11,15 J19,20 J23,24 J25

G19 G20,24 G17 G16 G14 G12 G11 G3,5,8

F1,3,4,6 F11,12 F17 F16 F22 F24

AREA 1

AREA 2

WHITEHILLS LAKE

THELON RIVER

312

412

365

45'

30'

30'

96°

30'

PRICE 10.00, includes: 2 maps & repor

AREA 1

AREA 2

WHITEHILLS LAKE

312

412

365

45'

96°

30'

95°30'

PRICE 10.00, includes: 2 maps & report.

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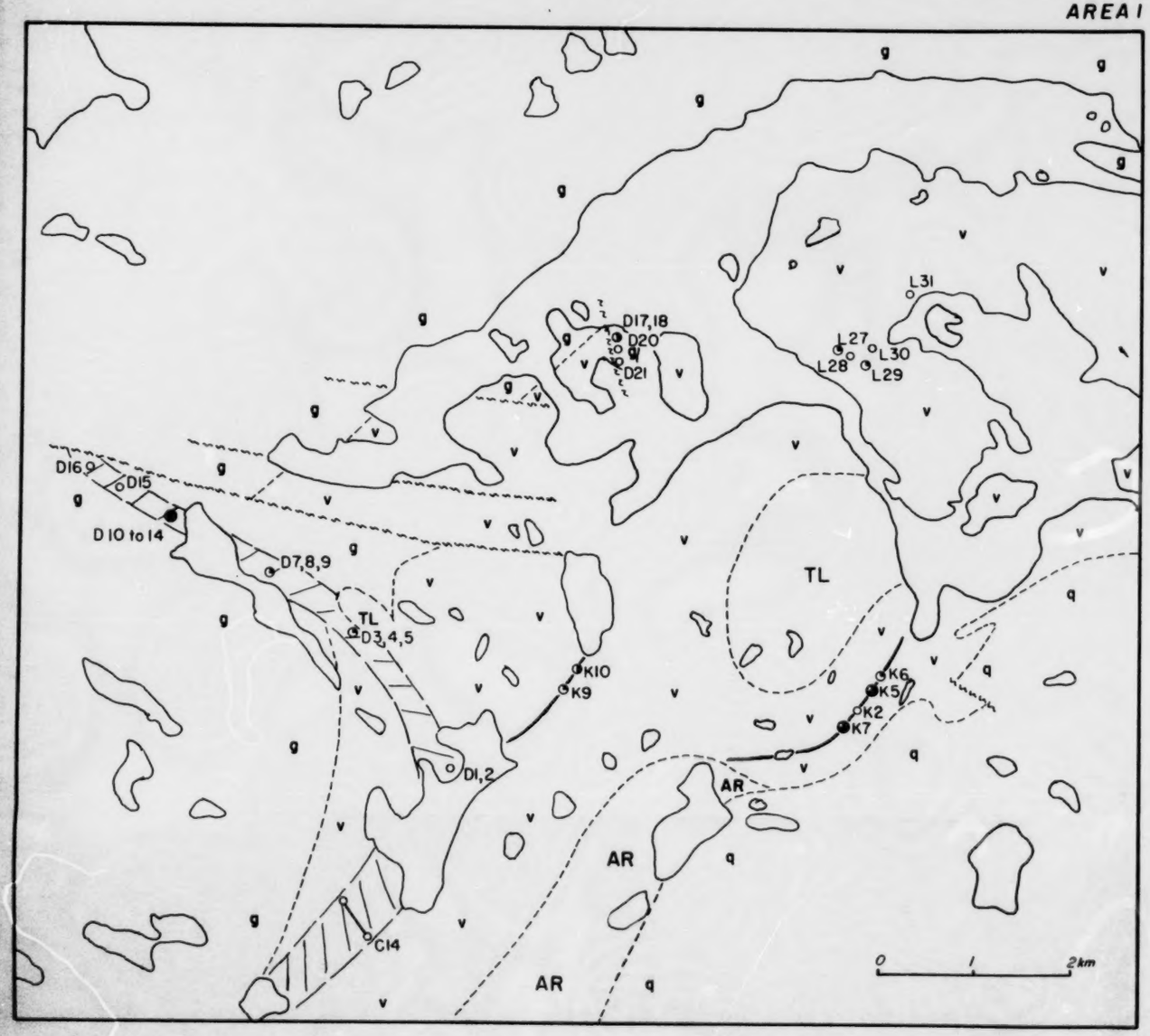
FIGURE 2: AREAS OF ANOMALOUS GOLD CONCENTRATIONS

AREA 1



LEGEND

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SYMBOLS

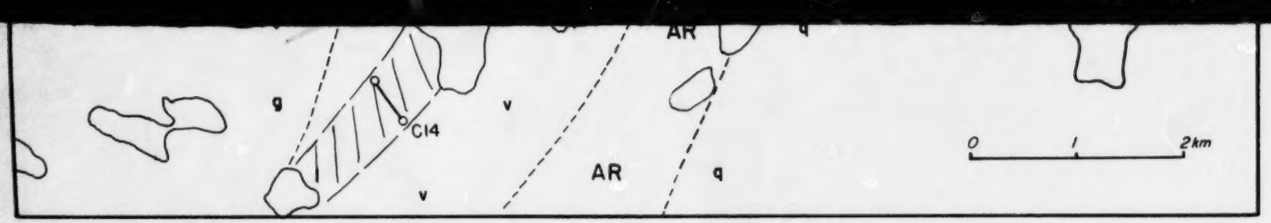
Geological contact

Fault

L16: Geochemical sample and number
- highly anomalous
- moderately anomalous
- anomalous
- possibly anomalous

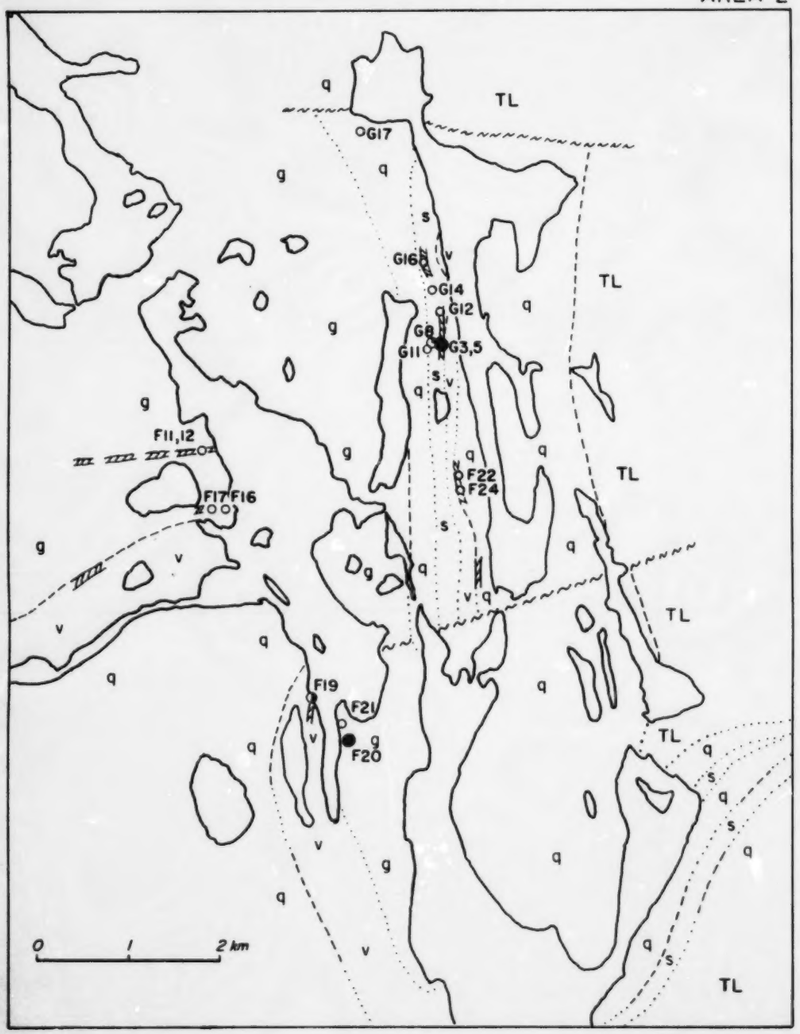
AREA 2

AREA 3

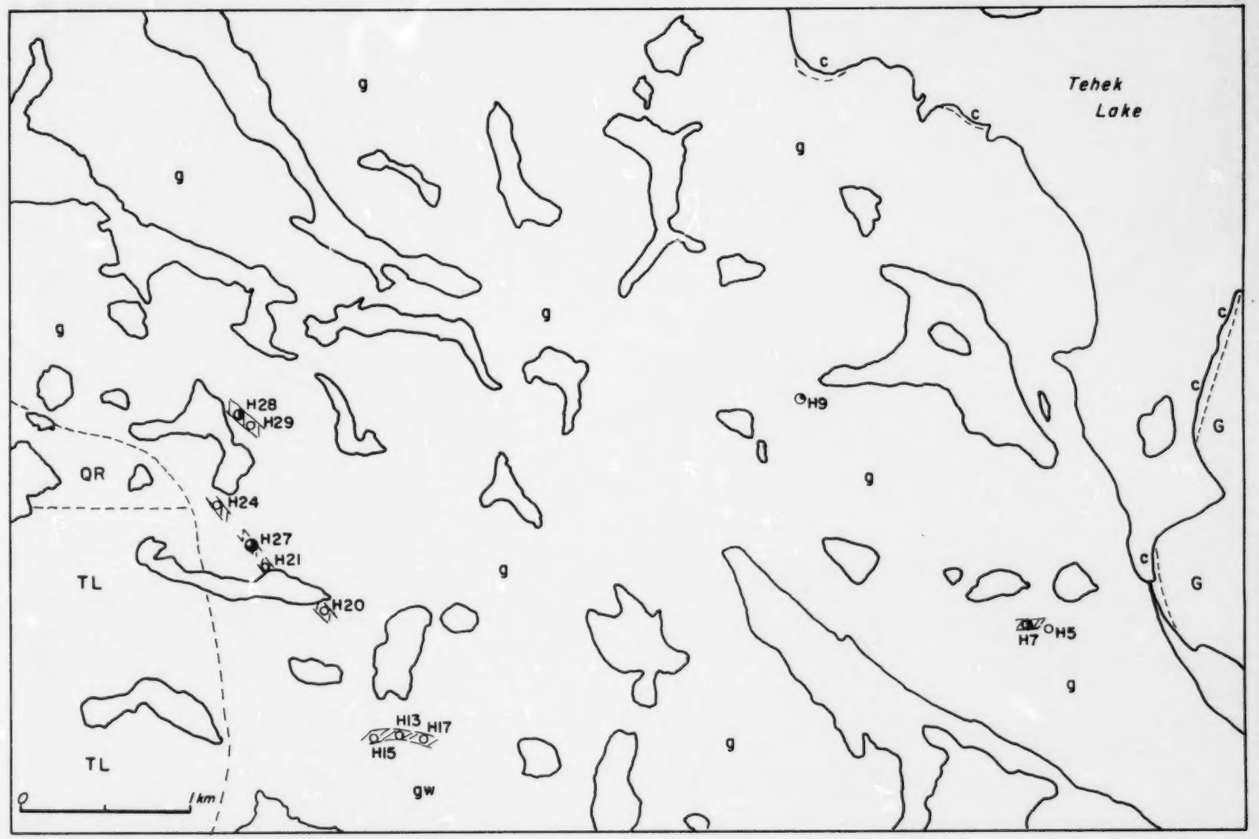


L16, Geochemical sample and number
●, highly anomalous
◑, anomalous
◕, moderately anomalous
◔, possibly anomalous

AREA 2



AREA 3

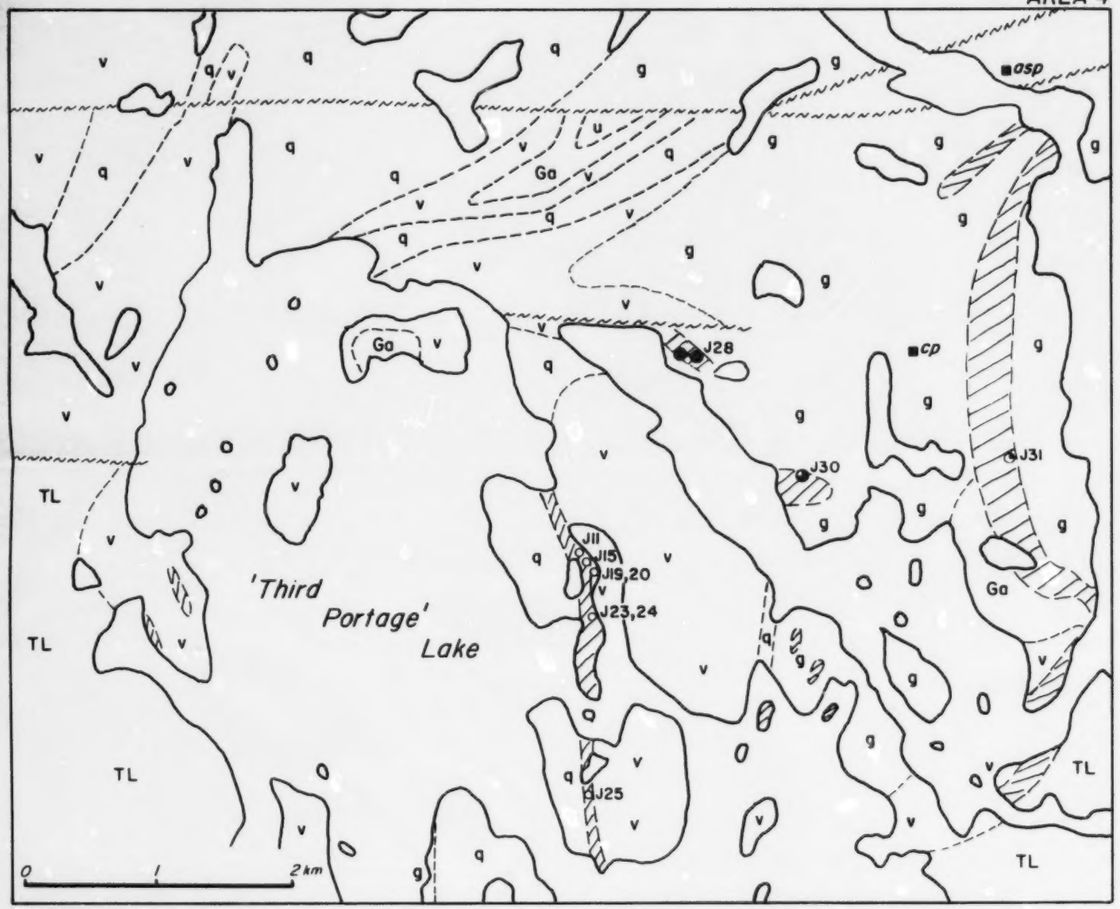


AREA 4

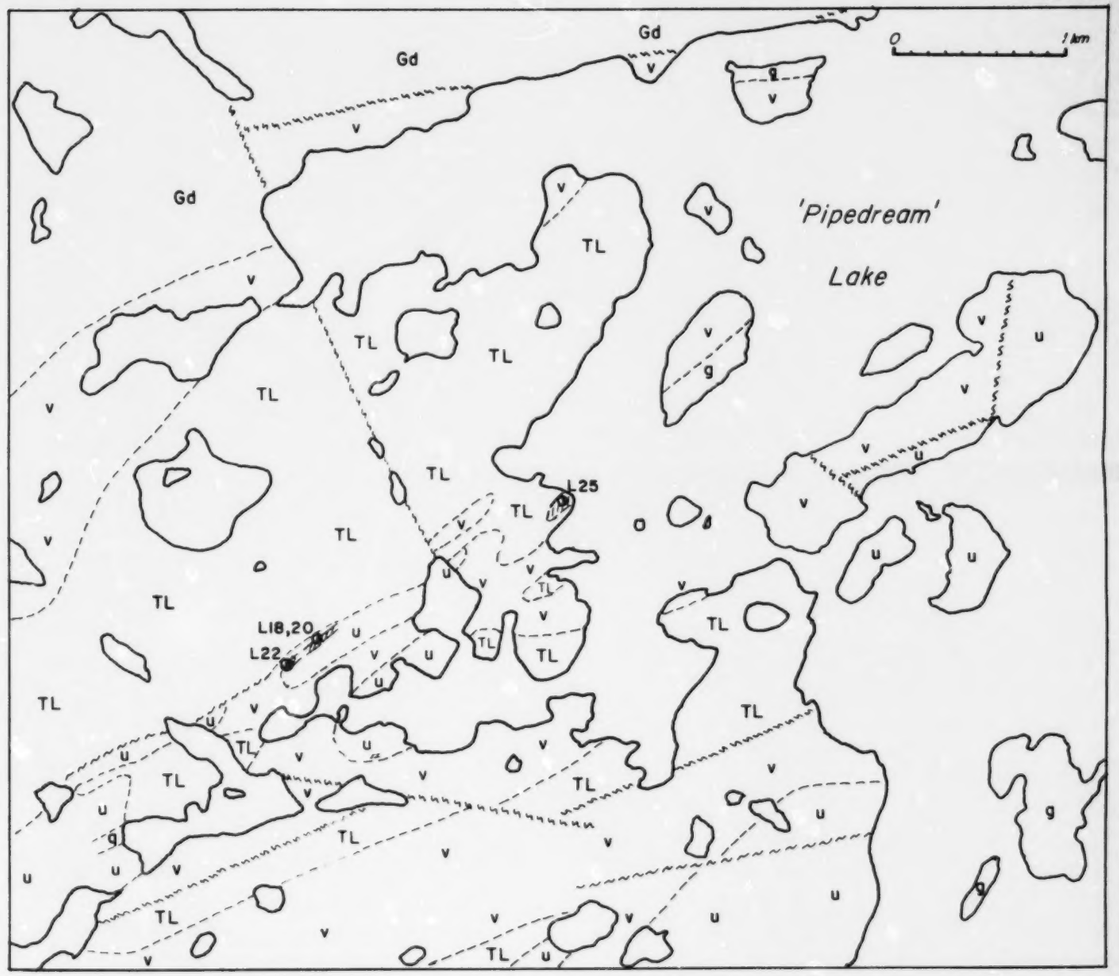
AREA 5

TL

AREA 4

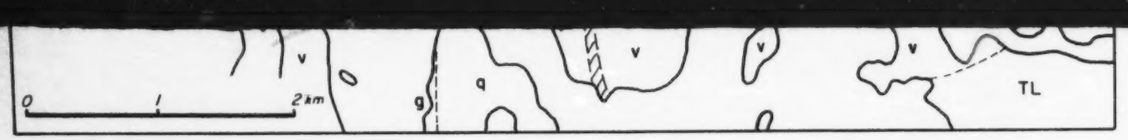


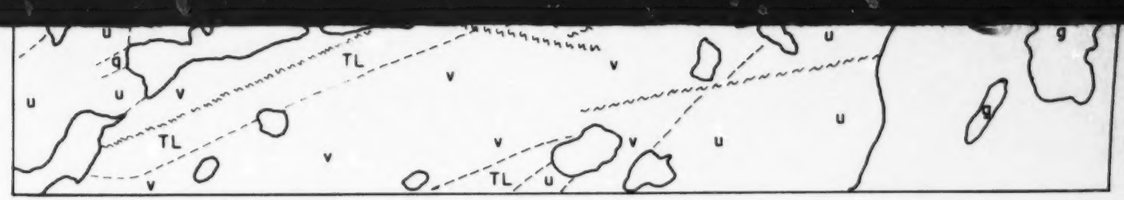
AREA 5



AREA 6

AREA 7





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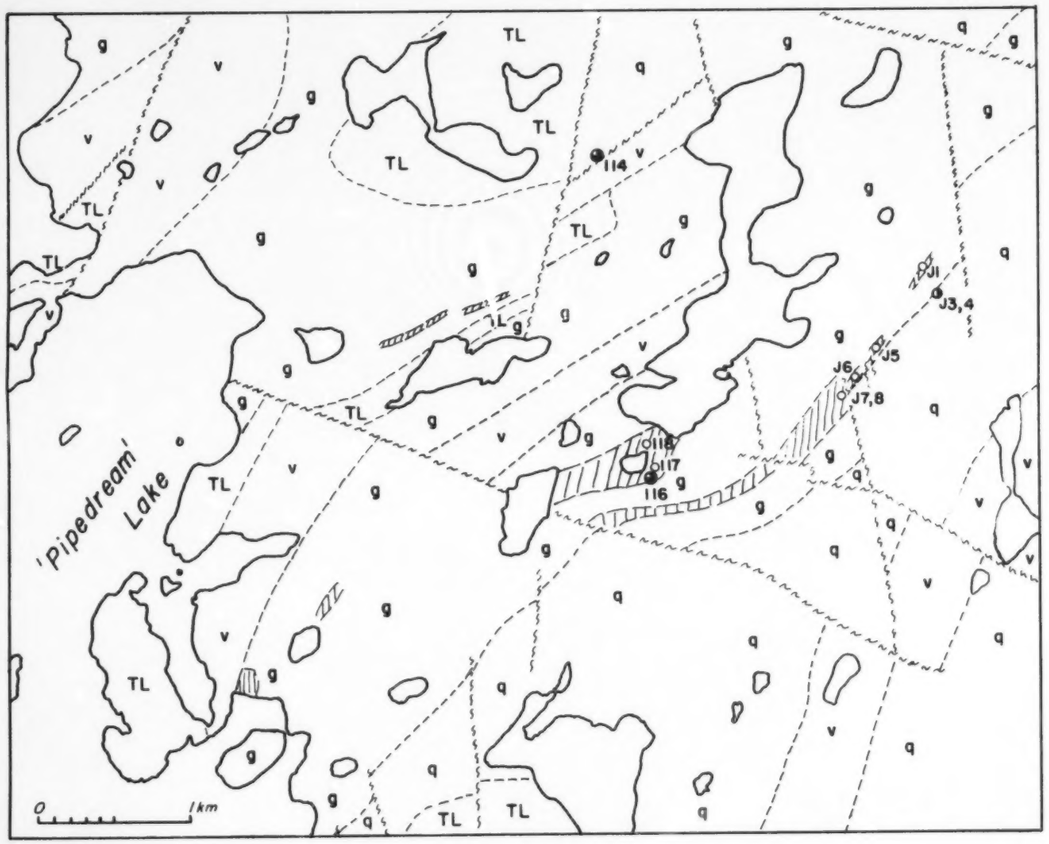
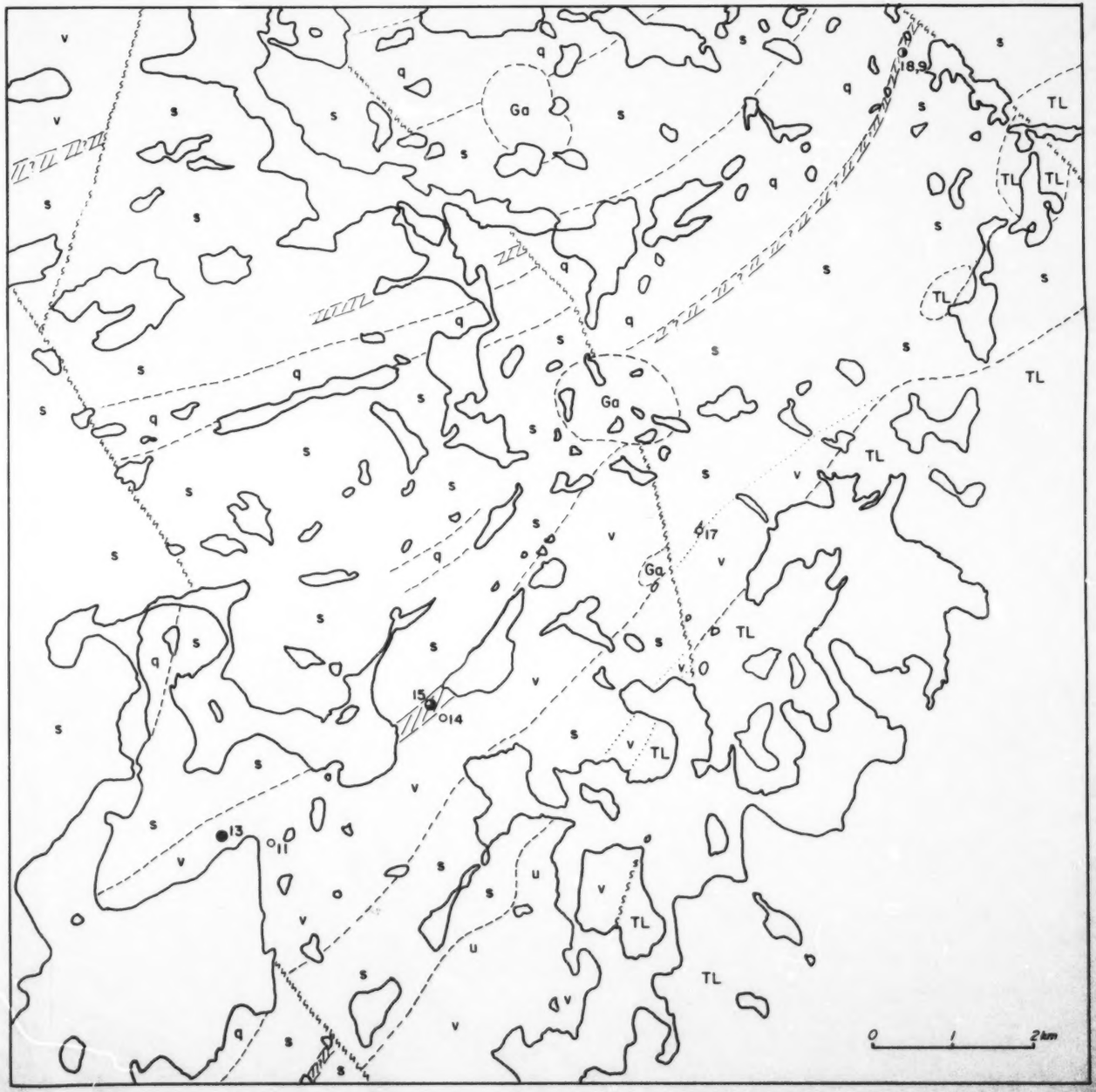


AREA 7



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